

6MN8

High-Mu Triple Triode

Duoducar Type
For Matrix-Amplifier Applications
in Color-TV Receivers

ELECTRICAL CHARACTERISTICS -Bogey Values

Heater Voltage (ac or dc)	E_h	6.3		V
Heater Current	I_h	0.9		A
Direct Interelectrode Capacitances: ^a		<i>Unit No.1</i>	<i>Unit No.2</i>	<i>Unit No.3</i>
Grid to plate	C_{gp}	2.6	2.6	2.6 pF
Input: G to (K, H)	C_{in}	4.6	4.6	4.6 pF
Output: P to (K, H)	C_{out}	0.33	0.57	0.65 pF

For the following characteristics, see Conditions below:
Values are for each unit.

Amplification Factor	μ	47	40	
Plate Resistance (Approx.) . . .	r_p	6250	10,000	Ω
Transconductance	G_m	7500	4000	μmho
Plate Current	I_b	11	4.8	mA
Grid Voltage (Approx.) for $I_b = 50\mu\text{A}$		-5	-11	V

Conditions:

Heater Voltage	E_h	6.3	6.3	V
Plate Voltage	E_b	125	200	V
Grid Voltage	E_c	-1	-4	V

MECHANICAL CHARACTERISTICS

Maximum Overall Length	2.875 in (73.02 mm)
Maximum Seated Length	2.50 in (63.5 mm)
Maximum Diameter	1.188 in (30.1 mm)
Dimensional Outline	JEDEC E9-60 See Outlines, Glass Tubes in General Section
Envelope	T9
Base	Small-Button Duodecar 12-Pin with Exhaust Tip (JEDEC No.E12-70)
Terminal Diagram	JEDEC 12HU
Type of Cathode	Coated Unipotential
Operating Position	Any

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MAXIMUM RATINGS – Design-Maximum Values^b

Values are for Each Unit

Plate Voltage	E_{bb}	330	V
Grid Voltage:			
Positive-bias value	E_{cc}	0	V
Plate Dissipation	P_b	3	W
Heater-cathode voltage (Each unit):			
Peak	e_{hkm}	±200	V
Average ^c	$E_{hk(av)}$	100	V
Heater Voltage , ac or dc	E_h	5.7 to 6.9	V

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance:

For fixed-bias operation	R_g	1	MΩ
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^a Measured without external shield in accordance with the current issue of EIA Standard RS-191.

^b As defined in the current issue of EIA Standard RS-239.

^c Measured with a dc meter.

TERMINAL DIAGRAM – Bottom View

- Pin 1 - Heater
- Pin 2 - Plate of Unit No.3
- Pin 3 - Cathode
- Pin 4 - Plate of Unit No.2
- Pin 5 - No Internal Connection
- Pin 6 - Plate of Unit No.1
- Pin 7 - Do Not Use
- Pin 8 - Grid of Unit No.1
- Pin 9 - Do Not Use
- Pin 10 - Grid of Unit No.2
- Pin 11 - Grid of Unit No.3
- Pin 12 - Heater

